

Sequence Listings:-

<110> Garvan Institute of Medical Research

Title of the Invention: Isoforms of the Human Vitamin D Receptor

<130> 91317

<140>

<141>

<160> 12

<170> PatentIn Ver. 2.0

SEQ ID NO: 1

<211> 96

<212> DNA

<213> Homo sapiens

<400> 1

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ggctgtcgat ggtgctcaga actgctggag tggagg 96

SEQ ID NO: 2

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 2

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tcaaaccgtg tggacatc ggcacatgatg aggatcat tctgacatgat gaggaaatgc 480
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SEQ ID NO: 3
<211> 1382
<212> DNA
<213> Homo sapiens

<400> 3

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cttccttgc	tgacccttgg	gactttgacc	ggaacgtgcc	ccggatctgt	gggtgtgtg	180
gagaccgagc	cactggctt	cacttcaatg	ctatgacctg	tgaaggctgc	aaaggcttct	240
tcagggcgaag	catgaagcgg	aaggcactat	tcacctgccc	cttcaacggg	gactgcccga	300
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gcatgatgaa	ggagttcatt	ctgacagatg	aggaagtgc	gaggaagcgg	gagatgatcc	420
tgaagcgaa	ggaggaggag	gccttgaagg	acagtctgcg	gccccagctg	tctgaggagc	480
agcagcgcat	cattgtata	ctgctggacg	cccaccataa	gacctacgac	cccacctact	540
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ga						1382

SEQ ID NO: 4
<211> 1534
<212> DNA
<213> Homo sapiens

<400> 4

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cttccttgc	tgacccttgg	gactttgacc	ggaacgtgcc	ccggatctgt	gggtgtgtg	180
gagaccgagc	cactggctt	cacttcaatg	ctatgacctg	tgaaggctgc	aaaggcttct	240
tcaggtgagc	ccccctcccc	ggctctcccc	agtggaaagg	gagggagaag	aagcaagggt	300
tttccatgaa	gggagccctt	gcattttca	catctcttcc	cttacaatgt	ccatggaaaca	360
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ggcctgcccgg	ctcaaacgct	gtgtggacat	cgccatgatg	aaggagttca	ttctgacaga	540
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cagtacgtg	accaaagccg	gacacaggct	ggagctgatt	gagccccctca	tcaagtccca	1200
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catcgatctcc	ccagatcg	ctgggggtca	ggacgcccgg	ctgattgagg	ccatccagga	1320

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 ctccaaagcag taccgtgcc ttccttcca gcctgagtgc agcatgaagc taacgcgcct 1500
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SEQ ID NO: 5

<211> 207

<212> DNA

<213> Homo sapiens

<400> 5

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 cccggcccaa ggcgaggagg aacagcggca ctaaggcaga aaggaagagg gcggtgtgtt 120
 caccgcgcgc ccaatccatc actcagcaac tcctagacgc tgtagaaaaag ttccctccgag 180
 gagcctgcca tccagtcgtg cgtgcag 207

SEQ ID NO: 6

<211> 157

<212> DNA

<213> Homo sapiens

<400> 6

aggcagcatg aaacagtggg atgtgcagag agaagatctg gttccagtag ctctgacact 60
 cctcagctgt agaaaaccttg acaaactctgc acatcagttt tacaatggaa cggatttttt 120
 tactttcat gtctgaaaag gctatgataa agatcaa 157

SEQ ID NO: 7

<211> 1574

<212> DNA

<213> Homo sapiens

<400> 7

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 cccggcccaa ggcgaggagg aacagcggca ctaaggcaga aaggaagagg gcggtgtgtt 120
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 gagcctgcca tccagtcgtg cgtgcagaag cttttggc tgaagtgtct gtgagacctc 240
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 tggcggccag cacttcctg cctgaccctg gagactttga cggAACGTG cccggatct 360
 gtggggtgtg tggagaccga gcccactggc ttcaacttcaa tgctatgacc tggaaaggct 420
 gcaaaggctt cttcaggcga agcatgaagc ggaaggact attcacctgc cccttcaacg 480
 gggactgccc catcaccaag gacaaccgac gcaactgcca ggcctgcgg ctcaaacgct 540
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 ctggggtgca ggacgcgcg ctgattgagg ccattccagga cccctgtcc aacacactgc 1380
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 tccagaagct agccgacctg cgcagctca atgaggagca ctccaaggcag taccgctgcc 1500

tctccttcca gcctgagtgc agcatgaagc taacgccccct tggctcgaa gtgttggca 1560
atgagatctc ctga 1574

SEQ ID NO: 8

<211> 122

<212> DNA

<213> Homo sapiens

<400> 8

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atgccaggcc ccgtgcacat tgctttgctt gcctccctca atcctcatag cttcttttg 120
gg 122

SEQ ID NO: 9

<211> 477

<212> PRT

<213> Homo sapiens

<400> 9

Met Glu Trp Arg Asn Lys Lys Arg Ser Asp Trp Leu Ser Met Val Leu
1 5 10 15

Arg Thr Ala Gly Val Glu Glu Ala Phe Gly Ser Glu Val Ser Val Arg
20 25 30

Pro His Arg Arg Ala Pro Leu Gly Ser Thr Tyr Leu Pro Pro Ala Pro
35 40 45

Ser Gly Met Glu Ala Met Ala Ala Ser Thr Ser Leu Pro Asp Pro Gly
50 55 60

Asp Phe Asp Arg Asn Val Pro Arg Ile Cys Gly Val Cys Gly Asp Arg
65 70 75 80

Ala Thr Gly Phe His Phe Asn Ala Met Thr Cys Glu Gly Cys Lys Gly
85 90 95

Phe Phe Arg Arg Ser Met Lys Arg Lys Ala Leu Phe Thr Cys Pro Phe
100 105 110

Asn Gly Asp Cys Arg Ile Thr Lys Asp Asn Arg Arg His Cys Gln Ala
115 120 125

Cys Arg Leu Lys Arg Cys Val Asp Ile Gly Met Met Lys Glu Phe Ile
130 135 140

Leu Thr Asp Glu Glu Val Gln Arg Lys Arg Glu Met Ile Leu Lys Arg
145 150 155 160

Lys Glu Glu Glu Ala Leu Lys Asp Ser Leu Arg Pro Lys Leu Ser Glu
165 170 175

Glu Gln Gln Arg Ile Ile Ala Ile Leu Leu Asp Ala His His Lys Thr
180 185 190

Tyr Asp Pro Thr Tyr Ser Asp Phe Cys Gln Phe Arg Pro Pro Val Arg
195 200 205

Val Asn Asp Gly Gly Gly Ser His Pro Ser Arg Pro Asn Ser Arg His
210 215 220

Thr Pro Ser Phe Ser Gly Asp Ser Ser Ser Ser Cys Ser Asp His Cys
225 230 235 240

Ile Thr Ser Ser Asp Met Met Asp Ser Ser Phe Ser Asn Leu Asp
245 250 255

Leu Ser Glu Glu Asp Ser Asp Asp Pro Ser Val Thr Leu Glu Leu Ser
260 265 270

Gln Leu Ser Met Leu Pro His Leu Ala Asp Leu Val Ser Tyr Ser Ile
275 280 285

Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro Gly Phe Arg Asp Leu
290 295 300

Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser Ala Ile Glu Val
305 310 315 320

Ile Met Leu Arg Ser Asn Glu Ser Phe Thr Met Asp Asp Met Ser Trp
325 330 335

Thr Cys Gly Asn Gln Asp Tyr Lys Tyr Arg Val Ser Asp Val Thr Lys
340 345 350

Ala Gly His Ser Leu Glu Leu Ile Glu Pro Leu Ile Lys Phe Gln Val
355 360 365

Gly Leu Lys Lys Leu Asn Leu His Glu Glu Glu His Val Leu Leu Met
370 375 380

Ala Ile Cys Ile Val Ser Pro Asp Arg Pro Gly Val Gln Asp Ala Ala
385 390 395 400

Leu Ile Glu Ala Ile Gln Asp Arg Leu Ser Asn Thr Leu Gln Thr Tyr
405 410 415

Ile Arg Cys Arg His Pro Pro Pro Gly Ser His Leu Leu Tyr Ala Lys
420 425 430

Met Ile Gln Lys Leu Ala Asp Leu Arg Ser Leu Asn Glu Glu His Ser
435 440 445

Lys Gln Tyr Arg Cys Leu Ser Phe Gln Pro Glu Cys Ser Met Lys Leu
450 455 460

Thr Pro Leu Val Leu Glu Val Phe Gly Asn Glu Ile Ser
465 470 475

SEQ ID NO: 10
<211> 450
<212> PRT
<213> Homo sapiens

<400> 10
Met Glu Trp Arg Asn Lys Lys Arg Ser Asp Trp Leu Ser Met Val Leu
1 5 10 15
Arg Thr Ala Gly Val Glu Gly Met Glu Ala Met Ala Ala Ser Thr Ser
20 25 30
Leu Pro Asp Pro Gly Asp Phe Asp Arg Asn Val Pro Arg Ile Cys Gly
35 40 45
Val Cys Gly Asp Arg Ala Thr Gly Phe His Phe Asn Ala Met Thr Cys
50 55 60
Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Met Lys Arg Lys Ala Leu
65 70 75 80
Phe Thr Cys Pro Phe Asn Gly Asp Cys Arg Ile Thr Lys Asp Asn Arg
85 90 95
Arg His Cys Gln Ala Cys Arg Leu Lys Arg Cys Val Asp Ile Gly Met
100 105 110
Met Lys Glu Phe Ile Leu Thr Asp Glu Glu Val Gln Arg Lys Arg Glu
115 120 125
Met Ile Leu Lys Arg Lys Glu Glu Ala Leu Lys Asp Ser Leu Arg
130 135 140
Pro Lys Leu Ser Glu Glu Gln Gln Arg Ile Ile Ala Ile Leu Leu Asp
145 150 155 160
Ala His His Lys Thr Tyr Asp Pro Thr Tyr Ser Asp Phe Cys Gln Phe
165 170 175
Arg Pro Pro Val Arg Val Asn Asp Gly Gly Ser His Pro Ser Arg
180 185 190
Pro Asn Ser Arg His Thr Pro Ser Phe Ser Gly Asp Ser Ser Ser Ser
195 200 205
Cys Ser Asp His Cys Ile Thr Ser Ser Asp Met Met Asp Ser Ser Ser
210 215 220
Phe Ser Asn Leu Asp Leu Ser Glu Glu Asp Ser Asp Asp Pro Ser Val
225 230 235 240
Thr Leu Glu Leu Ser Gln Leu Ser Met Leu Pro His Leu Ala Asp Leu
245 250 255
Val Ser Tyr Ser Ile Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro
260 265 270
Gly Phe Arg Asp Leu Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser
275 280 285

Ser Ala Ile Glu Val Ile Met Leu Arg Ser Asn Glu Ser Phe Thr Met
 290 295 300
 Asp Asp Met Ser Trp Thr Cys Gly Asn Gln Asp Tyr Lys Tyr Arg Val
 305 310 315 320
 Ser Asp Val Thr Lys Ala Gly His Ser Leu Glu Leu Ile Glu Pro Leu
 325 330 335
 Ile Lys Phe Gln Val Gly Leu Lys Lys Leu Asn Leu His Glu Glu Glu
 340 345 350
 His Val Leu Leu Met Ala Ile Cys Ile Val Ser Pro Asp Arg Pro Gly
 355 360 365
 Val Gln Asp Ala Ala Leu Ile Glu Ala Ile Gln Asp Arg Leu Ser Asn
 370 375 380
 Thr Leu Gln Thr Tyr Ile Arg Cys Arg His Pro Pro Pro Gly Ser His
 385 390 395 400
 Leu Leu Tyr Ala Lys Met Ile Gln Lys Leu Ala Asp Leu Arg Ser Leu
 405 410 415
 Asn Glu Glu His Ser Lys Gln Tyr Arg Cys Leu Ser Phe Gln Pro Glu
 420 425 430
 Cys Ser Met Lys Leu Thr Pro Leu Val Leu Glu Val Phe Gly Asn Glu
 435 440 445
 Ile Ser
 450

SEQ ID NO: 11
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 11
 Met Glu Trp Arg Asn Lys Lys Arg Ser Asp Trp Leu Ser Met Val Leu
 1 5 10 15
 Arg Thr Ala Gly Val Glu Gly Met Glu Ala Met Ala Ala Ser Thr Ser
 20 25 30
 Leu Pro Asp Pro Gly Asp Phe Asp Arg Asn Val Pro Arg Ile Cys Gly
 35 40 45
 Val Cys Gly Asp Arg Ala Thr Gly Phe His Phe Asn Ala Met Thr Cys
 50 55 60
 Glu Gly Cys Lys Gly Phe Phe Arg
 65 70

SEQ ID NO: 12

<211> 427

<212> PRT

<213> Homo sapiens

<400> 12

Met Glu Ala Met Ala Ala Ser Thr Ser Leu Pro Asp Pro Gly Asp Phe
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Asp Arg Asn Val Pro Arg Ile Cys Gly Val Cys Gly Asp Arg Ala Thr
20 25 30

Gly Phe His Phe Asn Ala Met Thr Cys Glu Gly Cys Lys Gly Phe Phe
35 40 45

Arg Arg Ser Met Lys Arg Lys Ala Leu Phe Thr Cys Pro Phe Asn Gly
50 55 60

Asp Cys Arg Ile Thr Lys Asp Asn Arg Arg His Cys Gln Ala Cys Arg
65 70 75 80

Leu Lys Arg Cys Val Asp Ile Gly Met Met Lys Glu Phe Ile Leu Thr
85 90 95

Asp Glu Glu Val Gln Arg Lys Arg Glu Met Ile Leu Lys Arg Lys Glu
100 105 110

Glu Glu Ala Leu Lys Asp Ser Leu Arg Pro Lys Leu Ser Glu Glu Gln
115 120 125

Gln Arg Ile Ile Ala Ile Leu Leu Asp Ala His His Lys Thr Tyr Asp
130 135 140

Pro Thr Tyr Ser Asp Phe Cys Gln Phe Arg Pro Pro Val Arg Val Asn
145 150 155 160

Asp Gly Gly Ser His Pro Ser Arg Pro Asn Ser Arg His Thr Pro
165 170 175

Ser Phe Ser Gly Asp Ser Ser Ser Cys Ser Asp His Cys Ile Thr
180 185 190

Ser Ser Asp Met Met Asp Ser Ser Ser Phe Ser Asn Leu Asp Leu Ser
195 200 205

Glu Glu Asp Ser Asp Asp Pro Ser Val Thr Leu Glu Leu Ser Gln Leu
210 215 220

Ser Met Leu Pro His Leu Ala Asp Leu Val Ser Tyr Ser Ile Gln Lys
225 230 235 240

Val Ile Gly Phe Ala Lys Met Ile Pro Gly Phe Arg Asp Leu Thr Ser
245 250 255

Glu Asp Gln Ile Val Leu Leu Lys Ser Ser Ala Ile Glu Val Ile Met
260 265 270

Leu Arg Ser Asn Glu Ser Phe Thr Met Asp Asp Met Ser Trp Thr Cys
275 280 285

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Gly Asn Gln Asp Tyr Lys Tyr Arg Val Ser Asp Val Thr Lys Ala Gly
290 295 300

His Ser Leu Glu Leu Ile Glu Pro Leu Ile Lys Phe Gln Val Gly Leu
305 310 315 320

Lys Lys Leu Asn Leu His Glu Glu His Val Leu Leu Met Ala Ile
325 330 335

Cys Ile Val Ser Pro Asp Arg Pro Gly Val Gln Asp Ala Ala Leu Ile
340 345 350

Glu Ala Ile Gln Asp Arg Leu Ser Asn Thr Leu Gln Thr Tyr Ile Arg
355 360 365

Cys Arg His Pro Pro Pro Gly Ser His Leu Leu Tyr Ala Lys Met Ile
370 375 380

Gln Lys Leu Ala Asp Leu Arg Ser Leu Asn Glu Glu His Ser Lys Gln
385 390 395 400

Tyr Arg Cys Leu Ser Phe Gln Pro Glu Cys Ser Met Lys Leu Thr Pro
405 410 415

Leu Val Leu Glu Val Phe Gly Asn Glu Ile Ser
420 425